National Telecommunications and Information Administration

Overview

Mission Statement

NTIA's mission is to promote the efficient and effective use of telecommunications and information resources in a manner that creates job opportunities, enhances U.S. competitiveness, and raises the standard of living.

Strategies and Activities

The telecommunications and information sector has become the driver for this country's economic growth. In this environment, NTIA's continuing work through the Administration's series of reports, entitled *Falling Through the Net* reports highlighted the Digital Divide as a major national and international issue. NTIA's spectrum management and cutting-edge research activities also promote the goal of universal telecommunication service for all Americans by identifying innovative uses and resources for affordable, alternative communications services. NTIA's grant programs serve to demonstrate the effectiveness of new communications and information technology applications in meeting the real needs of community development programs, schools, libraries, and other nonprofit organizations. NTIA's grants also help maintain the reach of public broadcasting infrastructure and support its transition to the digital age. Each of these program areas, though integrated domestic and international policy and technical work, keeps promotion of the benefits of competition and universal service as primary strategic planning goals. The combined technical and policy expertise of the agency help enable the U.S. to continue its lead in this integral part of global competitiveness.

NTIA Performance Goal 1: Advocate international telecommunications policies to help open international markets and promote U.S. interests

Rationale for Performance Goal:

NTIA will open markets to competition leading to lower prices, increased innovation, more options, and more competitive choices for telecommunications and information services for all consumers. These efforts directly support the Secretary's theme of building for the future and promoting U.S. competitiveness in the global marketplace, by strengthening and safeguarding the nation's economic infrastructure.

FY 1999 Performance

Measure 1.a: Number of "lessons learned" packages completed for foreign governments

FY 1999 Target	175
FY 1999 Actual	125
Analysis	Target substantially met. (71%) As planned, NTIA's Technology Opportunities Program (TOP) expanded its educational mission beyond U.S. borders in 1999, to share experiences with overseas policy-makers and practitioners. In June 1998, TOP conducted a full-day workshop on the international implications and lessons learned from U.S. applications in community networking. healthcare, public safety, and education. TOP also conducted an international outreach panel as part of its successful "Networks for People" conference, to include panelists from the World Bank, U.S. AID, and several private sector entities.

Data Validation and Verification

Data collection:
Frequency:
Data storage: ITA maintains and updates data storage.
Verification: ITA

FY 1999 Program Evaluation for NTIA Performance Goal 1

NTIA continued to advance the adoption of pro-competitive regulatory policies by other countries to facilitate liberalized access to foreign telecommunications and information markets. NTIA actively participated in bilateral consultations with foreign counterparts such as the European Union (EU) Commission, and various EU member countries, while advocating the Administration's telecommunications and information policies.

In a continuing effort to assist developing countries with efforts in privatization, liberalization, policy-making, and creation of competitive and open telecommunications markets, NTIA assisted in interagency planning of a joint ITU-WTO seminar focused on these issues. In

preparation for the WTO Seattle Ministerial, NTIA participated in several rounds of electronic-commerce negotiations, focusing on developing country issues. NTIA will actively participate in future WTO electronic commerce activities and in the upcoming GATS 2000 negotiations.

NTIA has provided technical and policy expertise to ongoing U.S.-Japan Telecommunications Deregulation negotiations, starting in May 1998. In March 1999, the U.S. Trade Representative (USTR) found Japan in violation of its WTO commitments to ensure a fair and competitive basic telecommunications market. USTR leads interagency discussions focused on Japan's interconnection and rights-of-way policies. NTIA provided experts on all matters, and provided liaison to state regulatory experts in response to Japan's concerns that U.S. state-level regulation hampers Japanese carriers' access to the U.S. market. Talks continue into 2000.

NTIA Performance Goal 2: Ensure radio spectrum provides the greatest benefit to all people

Rationale for Performance Goal:

Radio spectrum is a scarce resource supporting government communication, public safety, and national defense, while private sector uses are burgeoning. Efficient management of these resources, research into new and better spectrum uses, and participation in international organizations help to assign radio spectrum to meet needed services. This goal directly supports the Secretary's theme to provide management and stewardship of our Nation's resources and assets to ensure sustainable economic opportunities. NTIA's spectrum management activities are currently funded by other Federal agencies at the 80% level.

FY 1999 Performance

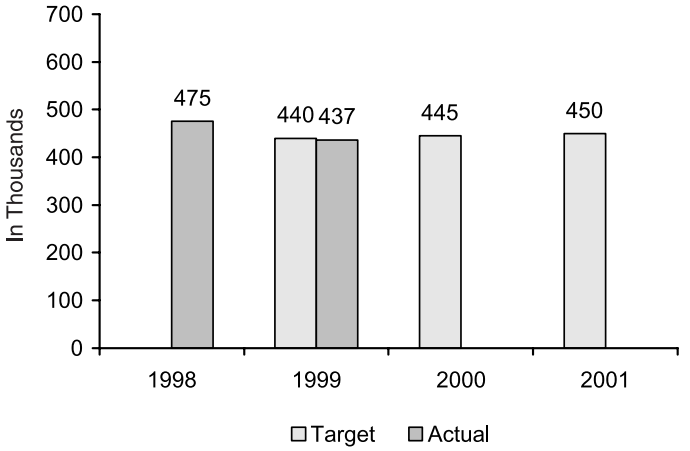
Measure 2.a: Number of authorized spectrum assignments

FY 1999 Target	440,000 frequency assignments
FY 1999 Actual	437,313 frequency assignments made
Analysis	Target met. NTIA satisfied 75,000 Federal agency requests for frequency assignment actions and fulfilled 62 Federal agency requests for future spectrum for major radio communications systems valued at $10 billion.

Data Validation and Verification

Data collection:	Government Master File (GMF) maintained by NTIA; data is collected from federal agency requests for spectrum assignment actions.
Frequency:	Standard reports issued monthly.
Data storage:	NTIA mission critical system; data available on CD-ROM.
Verification:	GMF has built-in checks; also staff review outside of these checks.
Comment:	Number of frequency spectrum assignments is a limited measure of effectiveness of these activities, but the most quantifiable. Total assignments depend on number of requests from the Federal agencies and may decrease with the adoption of more efficient devices and spectrum sharing arrangements. Radio spectrum assignment effectiveness is ensured by the Interdepartmental Radio Advisory Committee (IRAC) who administer quality advisory recommendations to the Assistant Secretary's office.

Authorized Spectrum Assignments



FY 1999 Program Evaluation for NTIA Performance Goal 2

NTIA assigns spectrum frequencies for use by systems owned and operated by the Federal government, in accordance with authority delegated by the President. To fulfill the Federal government's needs for access to the radio spectrum resources, NTIA's Office of Spectrum Management (OSM) has authorized 437,313 frequency assignments for Federal agencies' use. There were approximately 75,000 Federal agency requests for assignment actions in 1999.

Spectrum support was certified for 62 planned Federal systems with a total investment cost of almost $10 billion. Spectrum support certification is an Office of Management and Budget requirement for agencies of the Federal government. NTIA engineering staff work with sponsoring agencies to mitigate potential electromagnetic compatibility problems related to the introduction of new Federal systems into the radio-frequency environment. Examples of major systems receiving spectrum support certification in 1999 include the joint NOAA/DoD National Polar Orbiting Environmental Satellite System, the next generation of Global Positioning System satellites, the LANDSAT-7 Satellite System, a communications link for the Theater High Altitude Area Defense (THAAD) System, communications equipment for the Space Shuttle and International Space Station, the Mars Surveyor Orbiter mission, weapons control radars for the Air Force's F-15 fighter aircraft, and a data link used by the Navy's F-18 aircraft for weapons control of the Tomahawk missile.

NTIA Performance Goal 3: Advance the public interest in telecommunications, mass media, and information

Rationale for Performance Goal:

Affordable access to telecommunication technology is becoming a basic necessity for a successful and productive life in all sectors of our society, including business, academia, industry, banking, and government.

FY 1999 Performance

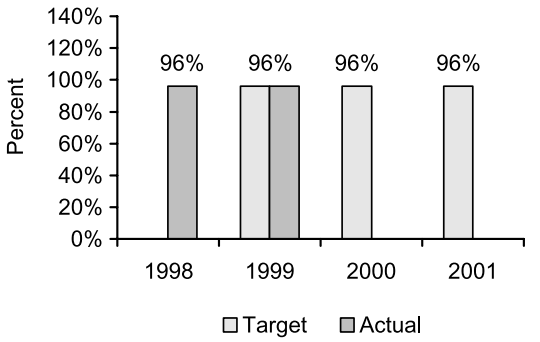
Measure 3.a: Maintain or increase telephone subscription rates

FY 1999 Target	96%
FY 1999 Actual	96%
Analysis	Target met

Data Validation and Verification

Data collection:	Data is available via Census Bureau.
Frequency:	Annual
Data storage:	The Census Bureau maintains and tabulates the data.
Verification:	The Census Bureau uses established statistical techniques.
Comment:	Since telephone subscription rates are already at 96%, there is only room for marginal annual improvement. In a dynamic economy, maintaining this subscription rate will constitute a significant challenge, compounded by the many personal factors that can influence penetration.

Telephone Subscription Rates



Measure 3.b: Increase Internet accessibility and use

FY 1999 Target	New measure. Target was not established for FY 1999.
FY 1999 Actual	26%
Analysis	There was no fixed FY 1999 target as this measure was developed after preparation of the FY 1999 APP. However, Internet accessibility and use objectives were substantially achieved based upon NTIA's activities in FY 1999.

Data Validation and Verification

Data collection:	NTIA is making special arrangements with Census Bureau.
Frequency:	Annual estimates
Data storage:	Bureau of the Census
Verification:	Standard survey statistical techniques
Comment:	Difficult to define and set data; unsure of resource for future data collection. NTIA uses this metric only as a means to identify changes in Internet penetration and use among all users and in low income and minority households.

FY 1999 Program Evaluation for NTIA Performance Goal 3

NTIA has been at the forefront of the Administration's efforts to facilitate the development of broadband networks and services. The agency has proposed and supported policies that would make it easier for new competitors to enter the market and offer advanced broadband services. NTIA has recommended regulatory changes that would enable incumbent local telephone companies to provide such services on a less-regulated basis, subject to safeguards to protect competition. NTIA has also explored whether and to what extent universal service policies may need to be changed to ensure affordable access by all Americans to broadband services. Throughout 1999, NTIA actively participated in Federal Communications Commission (FCC) proceedings on broadband issues. NTIA presented its position in three letters filed with the FCC. In one, NTIA favored an FCC ruling that would make it easier for local telephone companies to sell digital subscriber line (DSL) services to Internet service providers (ISPs). In a second letter, NTIA suggested conditions under which local telephone companies could be allowed to offer DSL services on a less-regulated basis. The letter also proposed changes to the FCC's co-location practices that would allow new entrants to provide competitive DSL services more quickly and at less cost. Finally, NTIA advocated an FCC ruling that when DSL services are used to access ISPs and the Internet, those services are interstate offerings subject to exclusive FCC jurisdiction.

One of the top priorities of the Administration is to ensure that basic and advanced telecommunications services are available to everyone and at affordable prices. The "digital divide" separates those who have access to telecommunications - - through telephones, computers and the Internet - - and those who do not. In July 1999, President Clinton and Secretary Daley released *Falling Through the Net III: Defining the Digital Divide*. The *Falling Through the Net* report series has been authored by NTIA and uses Census Bureau data to determine which Americans have access to telephones, computers, and the Internet, broken down by region, income, race, age, and other factors. These reports provide a principal foundation and justification for the Administration's telecommunications policies and a solid empirical foundation for policymakers and others throughout government and the private sector. As the United States takes steps to close the digital divide, there needs to be a measure of our progress, and the reports in this series provide such a measure. The data collected is an important metric that helps gauge the extent to which Americans are universally able to access the fruits of the Information Age. The demand for this report series is evidenced by the worldwide print, radio, and television coverage that accompanied the 1999 release. It has helped focus attention on the Administration's efforts to close the digital divide.

NTIA Performance Goal 4: Promote the availability and sources of advanced telecommunication and information services

Rationale for Performance Goal:

NTIA administers a substantive grant program designed to demonstrate the benefits and applications of the Internet. This is part of the Secretary's focus on the digital economy.

FY 1999 Performance

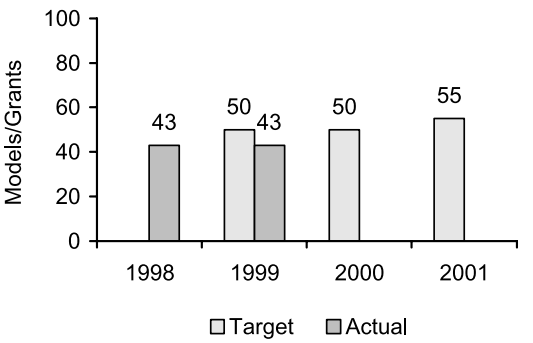
Measure 4.a: Number of models/grants available for non-profit or public-sector organizations

FY 1999 Target	50
FY 1999 Actual	43
Analysis	Target substantially met (86%) with 43 grants totaling $17.6 million in FY 1999. As a competitive grant program, there is no actual target for grants awarded. Rather, available funds are distributed to applicants most likely to serve as models for other organizations. Further analysis of unmet needs will emphasize new technology application.

Data Validation and Verification

Data collection:	Formal evaluation contracts
Frequency:	Annual report
Data storage:	Reports printed and circulated posted on Web site.
Verification:	NTIA staff and grantees review data.
Comment:	NTIA continues to make progress at incorporating evaluation methods in its grant program where appropriate. Models demonstrate how to use the information infrastructure to benefit communities and individuals.

Number of Models/Grants Available



FY 1999 Program Evaluation for NTIA Performance Goal 4

In 1999, forty-three public and non-profit institutions, competitively selected from more than 700 applicants, were awarded $17.6 million in federal grants by NTIA's Telecommunications Opportunities Program (TOP). Projects were selected on the basis of their ability to serve as models that can be replicated by similar organizations across the country. The grants were awarded in five categories; some examples of the awards include:

- *Education, Culture and Lifelong Learning.* The New Hampshire Community Technical College will use computers to establish two-way links between educators and local businesses in order to offer remedial education as well as computer classes to people who are considered the "working poor".
- *Public Services.* Second Harvest, a project in Chicago, Illinois, will use a nationwide computer network of local food banks to more effectively distribute food to areas with the greatest need.
- *Health.* The Shepherd Center in Atlanta, Georgia will use a high-speed Internet test bed to provide rehabilitation services to patients who have sustained catastrophic spinal cord and brain injuries.
- *Public Safety.* The Fund for the City of New York will create a shared network among juvenile offenders, their parents, caseworkers, and social service providers to promote youth development.
- Community-Wide Networking. The Philadelphia Enterprise Center in Pennsylvania will develop an Interactive Business Network to increase enterprise development and entrepreneurship in inner-city West Philadelphia.

Since the TOP program was initiated in 1994, NTIA has awarded more than $135 million in matching funds that has spurred nearly $330 million in total investments.

NTIA contracted with Westat, a research and consulting firm, to survey the 206 TOP projects awarded in 1994 and 1995. Westat also did in-depth case studies on a sample of 24 projects from 1994-1995. The study, conducted during the summer of 1998, is the first evaluation report in NTIA's ongoing effort to collect and share the lessons learned by the TOP grant recipients. The study's key findings, which were reported in February 1999, are highlighted below:

- *Ninety percent of the projects are still in operation.* The majority of projects reported meeting or exceeding nearly all of their objectives. Most important, the projects are sustaining themselves beyond the Federal grant period.
- *Each grant dollar generated another four dollars to support information infrastructure.* In addition to non-Federal matching funds, the grants led to investments that expanded their services beyond the original scope and further investments to support spin-off activities.
- *Model projects and extensive outreach are effectively encouraging the use of innovative information technology.* The 206 organizations alone reported responding to 79,000 unsolicited requests for information and hosted visitors representing over 5,000 organizations.
- *The grants are bringing communities together.* On average, each grant recipient worked with 3.4 partners. Sixty percent of the projects collaborated with private sector organizations. In addition, a number of projects reported new joint ventures that were direct outcomes or spinoffs of their TOP grants.
- *The projects focused on underserved communities.* Sixty-five percent of projects involved end users in rural areas, while 48 percent of projects reported involving end users in the

inner cities. Fifty-nine percent reached end users living in extreme poverty and 42 percent involved end users with disabilities.

- *The grant funds made the difference.* Seventy-five percent of grant recipients reported that their projects never would have happened without the TOP funds. Of the remaining 25 percent, 90 percent indicated that, without TOP support, the projects would have either reached significantly fewer people, or have been substantially delayed, or dramatically reduced their range of services.

Twenty-four case studies and a summary of findings also were published.

In October 1999, Westat completed additional case studies of twelve TOP projects funded in 1996. The case studies were selected in part to study three particular subjects: 1) issues particular to rural communities; 2) issues particular to urban communities; and 3) challenges in sustaining information technology-based projects. The case study report gives evidence of the special challenges that these twelve TOP projects faced and provides information for a better understanding of factors that can facilitate the success of such projects.